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The 11th International Forum on Design Management Research and Education Strategies, Resources, and Tools for Design Management Leadership

Tutorial Session

The Choreography of Leadership and the Capture of Process Knowledge

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An essential ingredient of dealing with transient problems is for everyone involved to focus on deep thinking about the problem rather than to immediate action. This paper considers the employment of visual thinking for observing the process of group work, and articulates the significance of visual thought in complex problem solving. It demonstrates the kinds of useful information that can be captured, and presents an approach to 'seeing' a pattern for leadership when dealing with transient problems. It concludes by suggesting ways in which the analysis and interpretation of group work could be enhanced by applying the visual methods of capturing content and process knowledge.

In today's highly dynamic even chaotic business climate, leaders now have to deal with a higher proportion of major problems which are featured by their short term transience. This is in sharp contrast to past situations where major problems were more likely to be of relatively stable long-term duration. This paper sets out to explore these issues by introducing a methodology of inquiry for bringing new insights into dealing with open-ended problems. This approach is discussed in relation to the Creative Industries and Education in Scotland. A partnership which is viewed as a transient problem, and where one of the over-riding concerns is that the pace of developments in the Creative Industries far out-strips the ability of education to catch up. Thus causing much controversy about the set of skills with which to equip students in order to operate effectively in the future.

The following information is taken from a study exploring the interface between the Creative Industries and Education in Scotland. The aim of the investigation was to

resolve the existing conflict(s) within the partnership in order to ensure its future survival and growth. The objectives were to establish a national dialogue to develop a shared understanding of the needs of both sides, and to generate a number of actions that would facilitate stronger networking. To help achieve this goal, a series of three geographically spread workshops were organised. The workshop participants were divided into groups and one of the methods of recording group dialogue was observation.

The following information was collected from the first workshop. The aim of group work was to analyse the problems faced by the different stakeholders and to identify the needs associated with the interface between education and the creative industries. Visual thinking¹ was the dominant observational tool. A balance between the internal dialogue of the observer and the external dialogue of the situation was sought. The act of thinking was not separated from the act of doing, and as such the researcher was both the observer and observed. This case study is an account of the process of observing group work *as it happened*.

Initial Observations

The group being observed consisted of a leader who was an experienced member of the Creative Industries, a facilitator who was a senior member of Academia, and 11 participants who represented a variety of educational perspectives. Collectively the group encompassed a diversity of information and knowledge, and immediately the

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¹ Visual thinking is a predominantly non-verbal mental activity of theoretical contemplation through practical deliberation directed towards some objective with a view to reaching respectively a propositional conclusion or a decision to act.

participants shared a commonality of purpose, as it was by choice that they attended the workshop and engaged in the discourse.

The process of observing began by looking and listening to the group discussion where individuals began by voicing their understanding of the central issues within the interface. One of the initial concerns raised by the group was an imbalance of 'stakeholders'. While it consisted of a diverse representation of people from the education sector it did not include any representatives from industry. This had direct repercussions on the group's ability to delineate the 'symptoms' existing within the interface between the creative industries and education, and directly affected their decision to remain as one group rather than divide into two smaller groups. It was decided the existing size (11) was not too large for the task set, and that remaining as one group would encourage bonding between the members.

As with most situations and in this one specifically, each participant put a large investment of effort in working out details and a high degree of commitment to the practice of accurate communication. However, the main challenge was for members to concentrate their efforts on reaching a common understanding of the central issues involved.

A central issue was the inter-relationship between method, agencies and facilities, when attempting to bridge the gap between education and industry and was established at the beginning of the workshop. It was highlighted to the group by the facilitator, that there was a significant shift happening as to where forums of discussion take place,

with Dundee Contemporary Arts and The Lighthouse, Glasgow being exemplar of new agencies in Scotland.

As the agency for this workshop was Dundee Contemporary Arts, this comment was particularly significant. It contained an implicit message: the group were participating *in* change rather than discussing the possibilities *of* change. Therefore the aim of the workshop was to sustain change, ensuring that it was moving continually and in an appropriate direction.

Observing the Dialogue through Mind Mapping

The application of visual thinking began by developing an understanding of the group and the context as a whole. In the first instance, *note-taking mind maps*² were employed as they, by their very nature, focus on the skill of listening: identifying key words and quotations embedded within a discourse. These abilities are essential for observing group work as they help determine the main themes or categories of thought. The relationship between observing and mind-mapping (i.e. listening to the group dialogue while looking at the observer's mind map) was crucial as it retained a balance between the external and internal dialogue of a situation which is central when aiming to retain a holistic understanding. The process of mind-mapping highlighted an informative rather than discursive nature of the group's conversation, and as this information was essentially being recorded and documented by one of the facilitators, there was little value in duplicating it, albeit in a lateral rather than linear format. Subsequently, there was an immediate need to employ visual thinking from an

² Buzan, T. & Buzan, B. (2000) *The Mind Map Book*. London: BBC

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alternative perspective, and as the use of photography had been rejected, the decision was made to incorporate the method of sketching to record group behaviour.

Visualising Non-Verbal Dialogue

Non-verbal language (body language) is known to play a major role within group communication, and as a result, observation focused on gathering information surrounding the dynamic nature of the group and particularly, an individual's position(s) within the workshop environment. The process of observing the form of the group discourse began as a simple exercise: the observer's attention oscillated between listening to the content of group dialogue, and looking at the pattern of group movement within the workshop environment.

In the first instance, information regarding the group formation and movement was captured via the method of drawing. The visual exercise provided information concerning the *result* of group actions: it marked progression from one task to another by recording physical movement from one destination to another within the workshop environment (Figure 1).

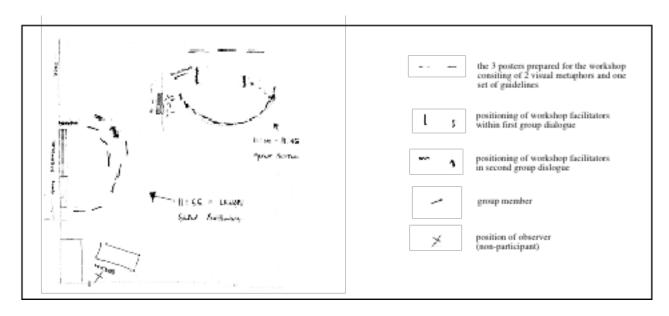


Figure 1: visual representing the formation and movement of group within the workshop environment.

However, on reflection of the information collected from both the methods of mind mapping and drawing, the observer intuitively recognised that subtle pieces of information were being missed. When information gathered from the technique of mind mapping was separated from information collected from the technique of drawing, information about the process of group work was being missed. Therefore, the value of *figure 1* lies in relation to the process of observing group work and *does not lie* directly in the information recorded. The significance of the drawing is that it was a vehicle for focusing the observer's attention toward the unmarked space between the individual and group movements. While concentrating on the space between the drawn images, a series of questions were triggered in relation to the *process* of moving, particularly the set of behaviours that were initiated by the decision to move.

Observing Empty Space and Silent Communication

The unspoken communication between people is as important a part of the dialogue of group work as verbal communication. For example, proxemics (the spatial location of individuals in relation to one another) has shown to affect the degree and significance of negotiation between individuals.³ Those individuals who remain distant to others tend to play a lesser role in the group process, whilst those who are actively animated in their proximal behaviour tend to carry more weight in what they are communicating.

Taking into account that time is a central issue *during* the practice of observing group work because of the speed at which actions and interactions occur, and drawing on the aforementioned knowledge of proxemics, the observer's decision-making process was directly affected. Subsequently, the dynamic nature of this group was observed by focusing upon the space and movement between individual members; the relationship of space between facilitators and participants; body language, and the pattern of dialogue. This information was collectively recorded through the method of sketching

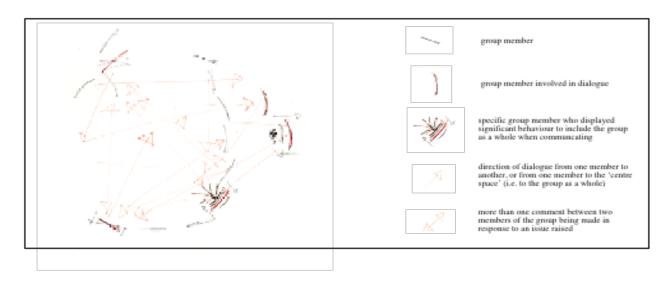


Figure 2: an example of the holistic dialogue of group work recorded through sketching

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³ Hall, E.T. (1966) *The Hidden Dimension*. New York:

The explicit value of visual thinking, as demonstrated by Figure 2, is that it can communicate how a more holistic recording of group dialogue in multiple languages, (verbal and non-verbal), can be accommodated in an immediate and comprehensive way. The implicit value of visual thinking is that it is a transferable way of seeing: an approach to understanding a problem by retaining a relationship between the external and internal perspectives of a situation. It is a means of recording the internal dialogue of an observer while questioning the external dialogue of a group situation through the method of drawing. Thus allowing the observer to recognise the significance of empty space in group situation(s) and, to interpret and question the dynamic nature of group work.

Discussion

Mindfulness

Mindfulness is an awareness and understanding of our own mind and how it influences our perceptions and our actions. The cognitive aspects of mindfulness, as adopted by Langer,⁴ Bentz & Shapiro⁵ and Zinn,⁶ are that it is a way of seeing which causes and maintains inter-connections. It is a philosophical orientation: an approach to inquiry that draws a person's attention and awareness to the impermanence and uncertainty surrounding each situation and/or problem.

Whilst it is clear that observation should be as objective as possible, the problem with objective perspectives, is that they tends to lie independent of the observer and the

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⁴ Langer, E. J. (1989) Mindfulness. Reading, Massachusetts: Merloyd Lawrence.

⁵ Bentz, V. M. & Shapiro, J.J. (1998) *Mindful Inquiry in Social Research*. California; U.K.; New Delhi: SAGE

useful cognitive processes which are inherent in all observational states. Whilst objectivity attempts to minimise these cognitive processes, within visual thinking they are the most important part of conducting both observation and the processes of internal dialogue that go with observing.

Every group situation is unique in that no two group dialogues are exactly the same, even when the membership of a group is duplicated and the topic under investigation is repeated. Therefore, when observing the process of group work, an observer must approach the situation mindfully. S/he must purposefully pay attention to the present moment in a non-judgemental way.

In the case study described in the previous section, both processes i.e. observing and thinking about the observation occurred simultaneously. However, it was with the proviso that the observation should be little interfered with by the internal dialogue, but that such a dialogue should be encouraged. The value of being able to combine both processes is that it facilitated an understanding of the content and process of group work as it happened. Mindful observation enhanced the quality of the experience of observing and the potential decisions within observation, whilst at the same time, giving rise to instantaneous or at least short-term duration propositions. Approaching the act of observing mindfully facilitated an understanding of the content and process of group work as it happened: it enhanced the richness of information contained within the duration of the event.

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⁶ Zinn, J.K. (1994) Wherever You Go There You Are. New York: Hyperion

Bohmian Dialogue

Dialoguing is a responsive tool which allows groups to hold on to their vision whilst embracing the widest and most creative aspects of problem solving. David Bohm, a theoretical physicist and one of dialogues original thinkers, found that the essence of dialogue is that it expands the horizons of a group; deepens conversation; directs discussion into unknown dimensions, and does not lead to a conclusion because the aim is not to achieve a conclusion.

If we separate the two dialoguing processes involved in the work of a group i.e. the internal and the external; there are a common set of internal behaviours that occur in both of them. For example, a person can be discussing a problem with a few people while sitting round a table. The person contributing verbally to the external dialogue can at the same time be visualising other thoughts in their head, which in turn trigger further contributions to the external dialogue. These visual ideas are not necessarily placed on the table in the form of a drawing and/or sketch, but visualising is nonetheless used. It is the same if a person has an internal dialogue with the problem s/he is working on. The images that a person associates with the problem can be seen inside their head. Within the work of David Bohm, there is no indication that the externalising of the visual mental images are being used at all in the process associated with the method of dialoguing. Indeed, in the majority of work that has considered the issues of dialoguing, little or no reference is made to the visual process of thought: it is essentially a word-based method. The solution of the visual process of thought it is acknowledged that in a later piece of work where Bohm collaborated with Mark Edwards in a dialogue which explored the

⁷ Nichol, L. (Ed)(1996) *David Bohm: On Dialogue*. London and New York: Routledge

⁸ Bohm, D. (1994) *Thought as a System*. London and New York: Routledge

⁹ Yankelovich, D. (1999) *The Magic of Dialogue*. London: Nicholas Brealey Publishing

relation between words and images¹⁰ the images are the expression of the product of thought rather than images of the process of thought.

In the case study described previously, two forms of dialogue were going on at the same time, but independent of one another. In terms of participating in the oral dialogue with the group, the observer was a non-participant observer. However, using the technique described under mindfulness, the observer conducted an internal dialogue with the process that was ongoing between the participants. As far as can be ascertained, this observer orientated internal dialogue, did not affect or influence the oral dialogue of the participants.

As the group were participating in change, there was no advance agenda other than an intention to explore thought. Subsequently, both the internal and external dialogues were of an essentially Bohmian nature. The sum of both dialogues, ongoing at the same time constitutes the holistic nature of a Bohmian dialogue.

Leadership and the Future

An essential ingredient of dealing with transient problems is for everyone involved to focus on deep thinking about the problems rather than to immediate action. One method of dealing with a transient problem is to embrace it in a future-state-vision or in the building of future scenarios. Future-state-visioning requires all problems to be engaged in a coherent embrace of a shared vision. This is partly achieved through the

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¹⁰ Bohm, B. & Edwards, M. (1991). *Changing Consciousness*. New York: HarperCollins Publishers

practice of building future scenarios where the very nature of the process itself helps participants embrace, expose and articulate an organisation's deepest values.¹¹

In this case study, the partnership between the Creative Industries and Education an example of a transient problem, where the aim was to uncover the deep core values, which systemise the partnership in an effort to project it forward in a new search for expression.

However, not only was the context of the workshop uncertain, so too was the nature of the task within the workshop as it had been observed that the group were participating *in* change. Although it was not explicitly stated, the group task was to construct a future scenario. In this sense, this case study had a connection to the notion of future-state-visioning.

However, this aspect of the paper does not require a significant connection to be drawn from the case study as the intention is to demonstrate that mindfulness and Bohmian dialogue will be a major aspect of future leadership where future-state-visioning will also be a key characteristic.

Conclusion

In the work that has been done presented, little has been said about the content but everything has been said about the process undergone by the participants. This is intentional. It is presented that capturing the essence of process knowledge is essential

¹¹ For information on Future-State-Visioning, see for example, Ball, J. (2001) *Environmental Future State Visioning: towards a visual and integrative approach to information management for environmental planning.* Local Environment, Vol. 6 No. 3, 351-366. Also, Constanza, R. (2000) *Visions of Alternative (Unpredictable) Futures and Their Use in Policy Analysis.* Conservation Ecology, Vol. 4, Issue 1, Article 5. [online] URL: http://www.consecol.org/vol4/iss1/art5.

to understanding the rapidly changing pattern of decision making and management required for working with open-ended problems.

The approach and the case study highlight some very important issues. It is clear that the method of sketching is an essential tool for interrogating the thought process of the observer, and capturing the process of building a future scenario. For example, the process of drawing figure 1 directed the observer's attention to her own decision making process, and in doing so, brought into awareness the capture of an intuitive decision. This is a subtle aspect of a creative session that would be lost if the observer were to rely on conventional methods for capturing group work. Another example is that the product of figure 2 is not just an aggregate of each member's separate and individual dance, rather it is choreography: the collective movement of thought of a group sharing in the development of a vision. It is a pictorial expression of the dynamics of a group when striving to embrace a plurality of perspectives.

Why is this information important for leadership? In terms of the experience of observing, it is clear that mindfulness is *the* essential operational tool for integrating both objective observation, and the internal dialogue of an observer. By interrogating the external process of group work from an internal perspective, the silent dialogue between education and the creative industries was recorded by capturing the process knowledge with visual as opposed to word based method(s). In doing so, figure 1 captured the intuitive decision to reform the group in a different domain or space within the workshop environment, which fundamentally affected the dynamics of communication within the group. Thus influencing the process and product of

constructing a scenario, and forming a deeper understanding and awareness of the unfolding nature of dialogue.

This information is also important because the method of sketching a group dialogue provides a richer source of information than say, for example, videotape and/or transcription, as it extracts multiple attributes at one time. After the event, it is then possible to see the choreography of performances and to extract information from the visuals in relation to which individuals dominated the group work. It is also possible to ascertain whether a plurality of perspectives was encouraged and indeed maintained. This information is essential when assessing the validity of a scenario, and for understand the minutiae of human relations behind the final decisions, as it is this minutia which may give rise to large and major difficulties later in the 'dance'.

It is my belief that those characteristics of the observer and the event of dialoguing, when combined will form the characteristics of future leaders. Leaders will act mindfully and in doing so, will both observe and conduct an internal dialogue in relation to the circumstances of their day-to-day work. I do not feel that such characteristics need only be associated with formal events (for example, discussion round the table). When leaders accept and develop this way of 'seeing', then the method will be practised under all circumstances. Indeed, in the best sense possible, leaders will become habituated to the practice of mindful 'seeing', thus enhancing their ability to operate confidently when dealing with situations of uncertainty and impermanence. Both of which, are features of Future-State-Visioning.