

---

Theses

---

2018

4E's Socratic Model: A grounded theory for managing team creativity in an organisational context

Philip Dennett

Follow this and additional works at: <https://researchonline.nd.edu.au/theses>



Part of the [Business Commons](#)

COMMONWEALTH OF AUSTRALIA  
Copyright Regulations 1969

WARNING

The material in this communication may be subject to copyright under the Act. Any further copying or communication of this material by you may be the subject of copyright protection under the Act.

Do not remove this notice.

# Chapter 6: Conclusions & Implications

---

This chapter starts with a justification of the theory developed, and its contribution to the literature. This is followed by a discussion on limitations (section 6.3) and suggestions for future research (section 6.4). Section 6.5 is a parting word on the thesis.

## 6.1 Theory Justification

### 6.1.1 Evaluation

A number of authors (Paul & Elder, 1998; Andriopoulos & Lowe, 2000; Bolten, 2001; Kessels, 2001; Chesters, 2012) present steps in a process to extend Socrates' philosophical model when it is applied to a business context. However, for the average executive, there is little in the way of explanation as to how they should negotiate each step in the process (Kessels, 2001).

Bolten (2001) gives some advice, suggesting that dialogic success comes from having a skilled facilitator, while Kessels (2001, p53) lists some of the techniques such a person should use. At the heart of the Socratic method is the elenchus that Chesters (2012) describes as a "process of questioning" (p77) but doesn't elaborate upon. A process, by definition, needs to be structured and contain a number of steps and it is not enough to say it requires only a skilled facilitator.

The purpose of this research was twofold: firstly, to identify the conditions under which using a Socratic approach as a tool to champion creativity was effective in an organisational context; and secondly, to develop, test and validate a model for its use.

The primary research question or core variable was: *What is the theory that explains the process of using a Socratic method to produce creative outcomes in organisational team interactions?*

The resulting 4E's Socratic Model was found to be an effective tool in producing creative outcomes in the context of an organisational team. It achieved this by producing creative, actionable outcomes in all seven organisations studied. It also modelled a culture that encouraged creativity and tolerance, and described an environment where creativity is encouraged by producing conditions that are conducive to it.

It achieved this by developing a system incorporating four critical elements: Firstly, by creating an environment that gave participants the personal freedom to provide an opinion in a non-threatening context. According to Sawyer (2006) this is a prerequisite for creativity to emerge;

Secondly, by providing encouragement to think creatively, outside normal operating constraints. This factor is critical in a team-based environment where members have disparate levels of individual creativity as shown in the creativity indices of teams studied in this research;

Thirdly, by giving recognition that each team member's opinion is valid and valued. Recognition helps instil a sense of control over the environment that increases the likelihood of a person thinking and acting creatively (Amabile & Grysiewicz, 1987); and

Fourthly, by challenging participants to go beyond the common wisdom to create something new and innovative. Challenge, however, must be enough to stimulate debate without producing unproductive conflict (Isaksen & Erkvall,

2010). The 4E's Socratic model created an environment where this balance was effectively maintained.

In each of the workshops a creative outcome was made possible through the interplay between the facilitator, the group as a whole, and individual members. The facilitator used a process of regressive abstraction as recommended by Nelson (1949), firstly by the use of careful questioning to expose tacit knowledge; secondly, by questioning beliefs related to that knowledge; and thirdly by facilitating ownership of the issues under discussion. This facilitated the recognition of new patterns in the knowledge, using the lens of a variety of perspectives.

### 6.1.2 Practical application

Glaser and Strauss (1967) identified four properties (degree of fit; understandable by the layman; general applicability; and user control) that a successful study should have in order for it to have practical application. These are addressed in Figure 6.1 below:

Figure 6.1.

*Validation against Glaser and Strauss (1967) properties.*

Properties	Validation
Degree of fit in the substantive area	Fit comes from the development of the theory based on world data that suggests they are usable in practice (Corbin & Strauss, 2015). Data was gathered from seven organisations in a variety of industries to avoid any bias in terms of industry type or organisation size. In each dialogue a workable creative outcome was achieved.

Understandable by the layman	In order to ensure the model could be easily understood by the layman, I published a book, <i>Creative Leadership Techniques</i> , aimed at practitioners, which discussed the genesis of the model and its structure. This was then validated through a presentation to a group of senior managers. As a result of feedback from this session an accompanying facilitator's guide was developed as a tool that could be used to guide a group when working with the model.
General applicability	Because the 4E's model was developed based on data gained from a range of organisations it can be said to have general applicability.
User control	The user has total control over the use of the 4E's model: the model identifies the steps in a process and gives supporting advice but the implementation relies on the user and the process can be adapted based on individual experience.

---

### 6.1.3 Viability of the model

Based on information gathered during the literature review, an initial version of the Socratic dialogue model was developed and put into the field for testing. It quickly became apparent that while the model included all the major phases of a successful dialogue, in its initial form it was a 'black box' model with unidentified linkages. Four linkages were identified and described by the model.

The first linkage is at the beginning rather than between the initial two steps. Kirkland (2012) stresses the need for the process to be reflexive and not imposed.

This reflexivity was kick-started by engaging team members through a dialogue on the question itself. This generated a sense of group ownership and removed any sense of individual agendas. This is consistent with the approach of Socrates himself, whom Plato, in the Republic, says started a dialogue with questions seeking to define the meaning of a concept. It is also consistent with recommendations made by modern scholars (Bolten, 2001; Chesters, 2012).

The second linkage was the establishment of a questioning structure rather than just relying on the skill of the facilitator. This enables the user to retain control over the process, a factor that Glaser and Strauss (1967) say is important in order for a study to have practical application. The structured questioning had a progressive momentum from concrete to abstract and finally creative questions. This facilitated the engagement of all members of a team, regardless of their individual creativity index.

The third linkage was a cognitive progression to questions to expose tacit knowledge and improve individual creative efficacy. This validates contentions made by a number of authors (Dollinger, 2003; Crowe, Dirks & Wenderoth, 2008; Mumford, Hunter & Byrne, 2009) who link cognition to creativity.

The final linkage was the development of a sense of collective consciousness, or flow, which Csikszentmihalyi (1996) says produces outcomes that exceed the value of individual inputs. While flow is recognised as being an important element of creativity it is often left to the skill of the facilitator to enhance it (Remenyi & Griffiths, 2007). In this study there were four elements that contributed to it. Firstly, the establishment of a common goal (as recommended by Kenny, 2008) shifted the focus from the individual to the group, resulting in many of the groups expressing amazement at how quickly they were able to produce a creative outcome.

Second was the use of story-telling (as recommended by Levi, 2005) to both clarify concepts and encourage participation. By asking participants for specific examples of their contentions it became self-evident when the facts of the story they were telling didn't support their original statements.

Third was the provision of positive feedback (as recommended by Paulus et al., 2002) that increased individual self-efficacy, overcoming deficiencies in individuals' perceptions of their own creativity.

The final element was the use of a process of summing up at critical stages (as recommended by Raelin, 2012). This helped to maintain flow and the production of collective rather than individual opinions.

The insights gained during the study were developed to form a system for producing creative outcomes using a Socratic process. This system was then described in a facilitator's guide and then tested and validated in the field.

## **6.2 Contribution to the Literature**

The 4E's Socratic model contributes to the literature in five ways; firstly by using a systems perspective to define a specific process based on the use of a Socratic dialogue to produce a creative outcome in an organisational context. Bordieu (1966) said that creativity is dependent on the relationship between the creator(s) and their position in the social system in which creativity takes place. The 4E's Socratic model describes such a system, where the individual players are supplanted in favour of the group in an environment directed by a neutral facilitator. The resulting process overcame deficiencies in individual creativity and team member relationships, but in order to thrive in an organisational context requires cultural tolerance of a creative mindset. It also challenges existing perceptual and

knowledge structures that Grisold & Peschl (2017) say are prerequisite in innovation and new knowledge creation.

Secondly, the questioning process needs to be structured in a way that encourages a sense of flow within the group but doesn't inhibit idea generation or result in group-think. This need was apparent from the first workshop, which concluded successfully, but while participants agreed on specific capabilities they appeared to have different meanings or implications for each of them. Structure was built into the questioning process by adding two extra dimensions (question type and cognition) to the single dimension Socratic dialogue. The introduction of question type resulted in a sense of engagement that is critical in a creative process in the production of a creative outcome (Schilpzand et al., 2011). The question-type dimension starts with questions that explore concrete knowledge rather than opinions and then progresses onto abstract questions (aiding synthesis) and then creative questions that produce new meaning. This addition also encouraged people with less creative efficacy to participate without fear of ridicule and went a long way towards the establishment of collective efficacy within the team. The second dimension overlaid this by introducing cognition into the mix. This encouraged more equal participation and resulted, in the words of one participant, in "minimising misunderstandings" and ensuring a "shared understanding".

Thirdly, the study found that creativity in teams is not dependent on individual creativity skills. Amabile's (1983) componential model of creativity suggests creativity emerges from a combination of task motivation, domain and creativity relevant skills. The 4E's Model suggests that a creative outcome in a group context is not dependent on individual creativity and that it comes instead from a combination of task motivation, domain-relevant skills and group interaction. In effect, individual

creativity skills were replaced by the creative skills of the group that were harnessed by the sense of flow that emerged during the process. The sense of collective efficacy resulting from this appeared to positively affect overall creativity. This finding is consistent with the findings of Kim and Shin (2015) who empirically tested team creativity in 97 work teams across 12 different organisations. Csikszentmihalyi (1999) extends Amabile's conception by overlaying Amabile's components on a background consisting of Bourdieu's (1966) idea of social and cultural capital interacting with a person's genetic makeup, talents and experience. If you replace 'person' with 'group' this approach is consistent with the 4E's Model. Ivcevic (2009) explains this apparent disconnect by making a distinction between creative potential and creative actualization which, he says, is influenced by social and cultural situational elements. The 4E's Socratic model removes impediments that contribute toward such a distinction.

The fourth contribution is that use of the 4E's Socratic model overcomes differences in professional backgrounds of participants. Foreman-Peck and Travers (2015) point out that the Socratic dialogue is not suitable for dialogues between participants of different professions and suggest that a Socratic dialogue doesn't take into account contextual aspects or allow for improvisation (two things they say are essential). By contrast, in my study, three of the organisations comprised participants from different professions and in each case the dialogue was concluded successfully by incorporating both context and improvisation. In the first instance, recognition of contextual elements is reliant on the skill of the facilitator but is supported by the integration of both question type and cognition stage. This helps expose commonalities and promote agreement on various points of fact that stop a dialogue from stalling. In the second instance, improvisation, the 4E's model's focus on

establishing flow promotes the feeling of collegiality that overrides traditional professional loyalties.

The final contribution is the documentation of a system that produces group flow. It does this through the process of exposing, debating and reconstituting to produce new understanding. The success of this approach relied on a collective flow being produced from motivated rather than creative individuals. It also addresses Csikszentmihalyi's (2015) statement that "...we still know very little, about the specific motivational values of different ways of patterning information." (P59).

The 4E's Socratic model also meets all six of Csikszentmihalyi and Sawyer's (1995) prerequisites for a successful creative process (social interaction, synthesis, knowledge, commitment, insight and challenge). It does this by a process of turning information from a variety of individuals into knowledge that is accepted by the group, which Kessels (2001) says is fundamental to a successful dialogue.

### **6.3 Limitations**

As this research was a phenomenological study, the results may not be applicable outside of the organisations studied (Bonoma, 1985), although this limitation has in part been addressed by studying seven companies in a range of industries. This study should be thought of as a starting point for companies wishing to promote creativity, rather than a prepackaged solution.

As participating organisations were self-selected this may indicate potential bias in that they may have a greater acceptance of the need for creativity in their organisations. However, through the use of a creativity index (grounded in data) we can see that there is a significant range in the results, which means that it would be difficult to claim there were any commonalities that were likely to produce a bias.

Another limitation is that the results are not quantifiable. This could be considered as an opportunity for future research to measure the results of implementing the model over time.

This study used an external facilitator (the author). This was done to concentrate on the applicability of the model itself and remove any bias that might have come from using different facilitators.

## **6.4 Suggestions for Future Research**

The aim of this research was to develop and test a model for using a Socratic approach to the management of creativity in organisations. The model was developed using a grounded theory methodology. However, taking Glaser and Strauss's (1967) view of theory as a process I believe there is considerable scope for ongoing development in four areas.

Firstly, research could involve case studies recording the experience of an organisation-wide implementation over time to enable them to build skill in using the process as well as quantify its success.

Secondly, studies could be conducted measuring changes to self-perceived individual creativity based on involvement in a team that implements the 4E's Socratic model. It would be interesting to see whether increases in individual creativity within a team make a positive difference to the team's creative ability.

Thirdly, further research could investigate the results of using facilitators who are part of the organisation being studied, rather than professional outsiders.

Finally, studies could be done that test the use of the model in different contexts; for example, in education or government.

## 6.5 A Parting Word

Bordieu (1966) described creativity as a social system. This study has identified both the players and their relationships in such a system and has produced a model to describe them. The resulting system applies a Socratic method (as described by Plato) to an organisational context.

The 4E's Socratic model extends the traditional method by identifying and describing the linkages between each step in the process that act together to produce a group working as a single creative entity. The result was a sense of group flow that produced creative outcomes not identified by individual creative effort in the organisations studied.

The 4E's Socratic Model, and the system built around it, explains the process of using a Socratic method to produce creative outcomes in organisational team interactions, thus answering the research question posed at the beginning of the thesis.

