Learning from all sides: Triple Task as a new approach to problem solving

Conference or Workshop Item

How to cite:

For guidance on citations see FAQs.

© 2010 The Authors
Version: Accepted Manuscript
Link(s) to article on publisher’s website:
http://www.orsoc.org.uk/conf/or52/or52_ExtendedAbstracts.pdf#page=19

Copyright and Moral Rights for the articles on this site are retained by the individual authors and/or other copyright owners. For more information on Open Research Online’s data policy on reuse of materials please consult the policies page.

oro.open.ac.uk
Title: Learning from all sides: Triple Task as a new approach to problem solving

Simon Bell and Stephen Morse

BELL, Simon
Communications and Systems Department, MCT Faculty, Open University
Milton Keynes, MK7 6AA.
Telephone: +44 (0)1953 604594
Email: s.g.bell@open.ac.uk

MORSE, Stephen
Department of Geography, University of Reading
Whiteknights, Reading RG6 6AB.
Telephone +44 (0)118 3788736
Email: s.morse@reading.ac.uk

Abstract
This paper introduces the rationale behind a new approach to problem solving – Triple Task (TT) – and discusses how this adds new dimensions to problem solving. TT provides a means for groups to engage together in purposeful work and, at the same time, for facilitators to understand what may be influencing the outputs generated by groups; in particular the role of the group dynamic. The latter should help with the process of facilitation but could also help groups appreciate their own functioning. TT thus moves away from envisioning problem solving only as a means to an output but to a better understanding of process that arrived at the output.

Keywords: Triple Task Method, problem solving, workshops
Background
Participatory research within the context of ‘Problem Structuring Methods’ (PSM) takes many forms but they share an underlying philosophy of ensuring that all those involved - be they 'researcher' or 'researched' - are involved in the design of a research process as well as the interpretation of findings. However, most participatory methods stop at the point where outputs have been achieved, with little or no attempt to appreciate the dynamics that may have been at play within the group to arrive at those outputs. But experienced workshop facilitators can ‘tell’ when a workshop has worked well, whether some groups have been more insightful than others, whether the dynamics within some groups or the background of the individuals within those groups have hindered or helped their process of discovery and so on. If there are problems with group dynamics then experienced facilitators will often try to intervene to help the group. Also, of course, the learning which the facilitator undertakes during workshops will help with the future facilitation of other workshops. However to date there has been little or no attempt to formalise all of this and thus provide an aid for both facilitators and participants.

Triple Task (TT) is a new participatory methodology for PSM which is designed to not only allow participants to undertake an analysis of problems or issues but also to allow for a degree of understanding as to the group dynamics that have been involved and ultimately how those dynamics may have influenced outputs. TT assumes that an understanding of this maelstrom of influence can help with an understanding as to why insights were arrived at and thus help with an appreciation of variation that may be seen between groups.

This paper provides a brief outline of the TT process and an example of its application in practice via an EU Framework 7 funded project called POINT (Policy Influence of Indicators).

Triple Task Process
TT involves three tasks. Task 1 generates the group’s systemic and reflective answers to research questions while Tasks 2 and 3 are designed to explore the ways in which the groups function and how this influences their analysis both in terms of what emerges under Task 1. From the perspective of participants they only experience Task 1; Tasks 2 and 3 are largely invisible to them. An outline of the three Tasks is set out as follows:

Task 1: This is derived from Soft systems methodology (Checkland and Scholes, 1990; Bell 2000; Mingers 2001; Winter and Checkland 2003) blended with worked/practitioner approaches derived from Participatory Appraisal methods (Chambers 2002, Bell and Coudert 2005) and elements from the psycho-dynamic tradition (Bridger 2007). Task 1 is the main element of TT in the sense that it is the task which is apparent to the groups and provides the insights with regard to the research questions. Task 1 is subdivided into three main steps as set out below:
1. **Scoping:** A Rich picture is employed as a means to capture ‘stories’ from participants. The Rich picture is an important element of Task 1 and each group begins with a pictorial representation of the significant components and linkages of the system being explored in the research. Participants are then encouraged to draw out major tasks and issues which form a central concern to them. These are organised in terms of precedent and priority and related tasks and issues are ‘clustered’ into indicative systems of challenge (SoCs).

2. **Visions of Change (VoCs):** This step encourages the groups to explore what changes are required in order to address the SoCs identified under (1). The emphasis is upon what the group deems to be more important and achievable.

3. **Desired change:** Groups are encouraged to set out what practical steps are required to bring about their VoC. This step is supplemented by activity planning and scenario setting. The latter employs another Rich Picture providing a sort of 'before' and 'after' story when placed next to the rich picture that arose out of Step 1.

Task 2: This is an ‘outside in’ review of the group dynamic. In effect it is the researcher’s assessment of the group process using a matrix approach originally developed at the Open University and known as BECM (used in, for example, the Open University Course: ‘Managing Complexity: a systems approach’ (Open University 2000)). BECM stands for Being, Engaging, Contextualising and Management. BECM can be used as a form of Socio-Analysis and is related to both systems and psychoanalytic traditions.

Task 3: ‘inside out’ review of the group dynamic – stakeholders’ assessment of their group process. Task 3 employs the Symlog (A SYstem for the Multiple Level Observation of Groups; www.symlog.com). Symlog has been applied in a wide range of situations (Nowack, 1987).

Tasks 2 and 3 represent different ways of looking at group behaviour. Previous studies have shown that such perspectives can overlap although there are also points of difference (Isenberg and Ennis 1981).

**Triple Task in action**
The TT methodology was first used by the authors in the European Union Seventh Framework Programme (FP7/2007-2013) under the grant agreement n° 217207: POINT (Policy Influence of Indicators) project. POINT is a pan-European project involving researchers from across the Union. Its explicit objective is to:

“Design a coherent framework of analysis and generate hypotheses on the use and influence of indicators, by pulling together the disparate strands of research and
practical experience of indicator use and influence, focusing broadly on European policies, but with a special emphasis on fostering change towards sustainability.” (POINT project document see point.pbworks.com).

As a part of this project a number of TT workshops were held in Malta, Slovakia, Finland, Denmark, Belgium and the UK where participants were divided into groups and asked to provide a broad analysis of the policy influence of indicators. In a paper as short as this it is not possible or indeed desirable to present the detailed results. Instead some findings from the three tasks are provided as Figures 1, 2 and 3 (all from the workshop held in Malta which had two groups).

<Figures 1, 2 and 3 near here>

The Task 1 outputs of Group B certainly had features that were different to those of Group A. The rich picture of B has more coherence and focus than A, with a clear story of indicators having to travel along a road with many obstacles and feedback loops. As a result there is a theme of linkage and complexity. By way of contrast the rich picture of Group A was more fragmented with a number of almost entirely separate stories that were only later brought together – albeit loosely. The same differences persisted through the outputs of Task 1, with Group B consistently having a stronger and more coherent theme. Indeed if anything the story painted by Group B was perhaps a little too ‘mechanical’ in the sense that the issues they raised are very familiar ones – almost ‘text book’. However, while Group A did struggle a little with coherence and focus in their outputs from Task 1 they did – perhaps ironically – have some more novel insights than did Group B. Group A raised issues such as the importance of knowing what is meant by sustainable development before one can really speak of creating and using indicators, and how education at all levels is an important prerequisite for this.

In terms of group function there does at first glance seem to be a link with the outputs from Task 1. The BECM scores for Group A were consistently poorer than those of Group B indicating that Group A had problems with coherence. One individual in Group A was attempting to dominate proceedings and this clearly did not go down well with the others. Hence a rich picture which is fragmented with individuals insisting on having their own say in the rich picture with little attempt to relate their thoughts to those of the others. This situation did change on the second day, and the dynamics of Group A improved. The Symlog results are less concrete than those of BECM and there are some interesting similarities and contrasts. Members of both groups saw their profile as being ‘group centred’, in contrast to being ‘individual centred’, and this is perhaps not surprising given the makeup of the groups (mostly public sector employees, academics, students and NGO staff). There was no representation from the private sector. Not many of the points were in the ‘most effective teamwork core’ area of the field diagram. Thus the overall assessment is one of groups that were ‘friendly’ group orientated) and on the border between accepting and opposing authority. For both groups it appears that the deviation from the Symlog ‘ideal’ group profile was greater in Day 2 than in Day 1. In day 1 the deviation from ideal group function was greater for Group A than Group B.
Conclusions
Pulling all the results together it does indeed appear that characteristics (quality?) of Task 1 outputs can at least be partly explained by the group dynamics at play. This was obviously not the only factor. The makeup of the two groups was also different, with arguably more homogeneity in Group B (all public sector employees) than in Group A which had a greater mix of sectors. Nonetheless the opportunity to be able to link outputs to function is powerful.

Acknowledgements
The research leading to these results has received funding from the European Commission's Seventh Framework Programme (FP7/2007-2013) under the grant agreement n° 217207 (POINT project, www.point.pb-works.com).

References


<table>
<thead>
<tr>
<th>Rich Picture</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Group A</strong></td>
<td>Disjointed rich picture with individuals adding ‘bits’ with little attempt to link those pieces into a coherent story. Some connecting lines added later. Good use of colour. Strong central theme on indicators (weather vane) but orbited by separate stories less obviously linked to the central theme. Some of the issues are more tangential and identified by individuals without apparent ‘buy in’ from others in the group but are relevant nonetheless.</td>
</tr>
<tr>
<td><strong>Group B</strong></td>
<td>Stronger story than that of A with the concept of indicator use as a ‘road’ with many pitfalls. Road runs through the whole picture and these is much connectivity. Very focussed upon the central theme of the workshop (indicator use) and much more so than that of A</td>
</tr>
</tbody>
</table>
Figure 2. BECM analysis of the two groups (A and B) in the Malta workshop. BECM results are presented as an ‘amoeba’ diagram with the circumference representing time and the arms representing BECM scores (high values equate to poorer group function).

<table>
<thead>
<tr>
<th>Group Amoeba</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group A</td>
<td>Indicates a great deal of fluctuation and change over the group over the four elements of BECM. The group does have a better middling stage but is generally conflictual</td>
</tr>
<tr>
<td>Group B</td>
<td>Group B is a very stable group. A great deal of good internal cohesion. Tends towards almost a ‘flat liner’ from the beginning of the second day.</td>
</tr>
</tbody>
</table>
Figure 3. Symlog analysis of the two groups (A and B) in the Malta workshop. Placement of group within the Symlog field diagram and Deviation from ideal Symlog profile

<table>
<thead>
<tr>
<th>Group A</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symlog field diagram: perception of group members regarding group function</td>
<td></td>
</tr>
<tr>
<td>Day 1</td>
<td>Perceptions rest mostly in the ‘liberal group work’ segment of the field diagram (group centred wing). This is probably to be expected given the nature of those invited to attend the workshop (public sectors employees and some NGO personnel). One point (day 1) is right in the ideal</td>
</tr>
<tr>
<td></td>
<td>Day 2</td>
</tr>
<tr>
<td>Deviation from ideal group profile (bars are the average scores for each group; lines are the ‘ideal’ profile for good group function)</td>
<td>Total deviation from ideal:</td>
</tr>
<tr>
<td>Day 1</td>
<td>Day 1 = 4.2</td>
</tr>
<tr>
<td>Day 2</td>
<td>Day 2 = 6.5</td>
</tr>
</tbody>
</table>

Broad agreement with the Symlog ideal profile for group work. Deviation from ideal is greater in Day 2 than in Day 1.
Group B
Symlog field diagram: perception of group members regarding group function

Day 1

Day 2

Very similar profile to that of Group A. Points are mostly in the group centred wing (liberal teamwork).

Deviation from ideal group profile (bars are the average scores for each group; lines are the ‘ideal’ profile for good group function)

Day 1

Day 2

Total deviation from ideal:

Day 1 = 3.4
Day 2 = 7.2

As with Group A – reasonable agreement with the Symlog ‘ideal’ profile for good group function. Group function appears to have been better in Day 1 than Day 2. Deviation for Group B is less than that of Group A for Day 1; a result broadly in agreement with the results of BECM.