BRIDGING THE GAP:
Transforming Knowledge into Action through Gaming and Simulation

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Researching Congruency in Facilitation Styles

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1. Introduction

Our experiences and research in the use of simulations and games for learning suggest that a complex web of factors informs the choices and decisions made by an educator when selecting and implementing a learning mode. Such decision points occur several times - the most important ones being:

- General decisions about preferred forms of learning methodology (lecture, experiential learning, simulation, etc)
- The appropriate form for a specific occasion
- The manner of presentation (face to face, online, role play, simulation etc)
- The preferred ‘style’ of performance as facilitator/teacher etc
- Manner of managing the process - once it has begun
- The approach to debriefing - transforming the nature of the experience into the naming of learning outcomes
- Assessing the learning - as named, and as experienced

Some of these are more often tacit/implicit decisions rather than conscious and informed ones. They are predicated as much on personal inclination and prior success as on the intended goals for learning/teaching process being designed.

While the literature has something to say about each of these points (Boud & Griffin, 1987; Boud & Miller, 1996; Brookfield, 1995; Heron, 1999) there is comparatively little supporting theoretical work to help individual educators gain insight into how their personal characteristics and philosophical stances inform and shape the nature of their on-going decision making processes.

2. Understanding the Forces in a Simulation

This paper continues our earlier work (Leigh, 2003; Leigh & Spindler, 1998, 2004) on the role of the facilitator in simulations and games for learning. In this paper we are exploring ways of identifying personal preferences and seeking to understand the manner in which they are likely to impact on - and shape the enacted styles of - educators as they choose specific learning environments. Of course, our interests centre on those educators choosing to use simulations and games. These usually generate a greater complexity of forces in a learning context where the facilitator has – for a time – relinquished control over participants’ actions and therefore may also put aside any claims to ‘authority’ as an identifier of learning gained from the experience.
Figure 1 presents our current understanding of the web of relationships among these forces. Each activity achieves a greater – or lesser – balance among the forces exerted by the expectations, requirements and perceptions of the context, the elements influencing the facilitator’s style and the relationship they are able to establish with each new group of participants. The key factor for our considerations is the degree of on-going uncertainty that must be associated with the interplay of all these factors.

Traditional ‘teaching’ methods attempt to reduce uncertainty and limit the degree of emotionality possible in a learning context. It does so through imposing order and structure on the relationships through the reservation of power to the teacher and limiting the set of acceptable interpretations about roles and responsibilities for all involved. In contrast, experiential learning activities, and particularly simulations and games, accept the impossibility of actually achieving useful ‘control’ of the learning. Instead they draw attention to the energy and ‘flow’ (Csikszentmihalyi, 1991) of the learning, tolerate ambiguity and regard as normal a greater degree of ‘indeterminancy’. Elsewhere (Leigh & Spindler, 1998) we have proposed that the most effective stance for the facilitator in such a setting is that of ‘vigilant observer’ - standing back from the action, ever ready to support the learning but careful to avoid unnecessarily imposing their needs, goals, or even observations.

To develop our work to this next stage we chose three particular ways of representing choices and preferences for action. Our own values suggest the importance of avoiding any suggestion of implying a hierarchy of values so we have chosen models that can be presented as a set of orthogonal relationships producing a 2x2 matrix of four cells each one sharing some features of the whole but having quite distinctive and unique characteristics.
3. Framework 1 - Approaches to Adult Learning

The first of these is a framework for thinking about approaches to adult learning. This framework was developed by David Boud (1987) who did not conceive of it as a matrix but simply as four different approaches adopted by adult educators in response to particular needs, and notes that -

Although I have portrayed forms representing distinct traditions, in practice a given facilitator in a given type of program might draw on aspects of more than one... This does not imply that the four approaches are in any sense interchangeable or equivalent, but that each may be a valid response to a given adult learning need. (p 227)

![Figure 2: approaches to adult learning](image)

We agree that each is a valid response to a particular set of circumstances. Our emergent understanding is that educator’s tend to develop a propensity for one approach/stance and have a greater or lesser capability for expanding their repertoire to include behaviours more closely related to any of the other three stances. Traditional teaching modes – with which most educators begin their own learning journey – are most closely aligned with key features of the approach identified by Boud as ‘Training and Efficiency in Learning’. It seems likely that such a familiar and comfortable stance will be the first one to be adopted by adults when they enter a role as adult educator. When exposed to other approaches alternative propensities may emerge to enable more flexible and varied responses to particular contexts.

4. Framework 2 - Project Types

The second framework has been borrowed from research on project management. Turner and Cochrane (Turner & Cochrane, 1993) built their matrix after reviewing concurrent research on project management. In their work, four project ‘types’ are identified according to the degree to which work methods are known and project goals are defined.
Figure 3: four models of project management

Their seminal article focused particularly on two aspects of project management - the ‘Work Breakdown Structure’ (WBS) and the ‘Product Breakdown Structure’ (PBS). They demonstrated that the usual conception of a project was that all aspects of both these tools were assumed to be comprehensively understood at the beginning of any project – but that this far from true. They showed that many projects begin with either unclear goals or a relative lack of knowledge about methods to be used. They then developed the ‘goals and methods matrix’ (Figure 3) to assist in locating particular projects in relation to these two factors.

Observations about parallels between features of their matrix and that of Boud’s approaches - when arranged as a matrix - led to its inclusion in this work. We saw the potential of their matrix for helping us identify the specific nature of contexts created by various experiential learning modes. We also think it will prove to be beneficial in assisting adult educators - including ourselves – to identify the degree of structure with which we are likely to be able to operate optimally in learning contexts.

5. Framework 3 – Relating to Others

The third framework chosen introduces a way of exploring choices about how we relate to others (Brett & Brett, 2002; Brett, Filipenko, Baruhas, & Brett, 1996). It fits within the category of ‘personal styles’ inventories’ drawing on four natural elements – earth, air, water and fire – as a way of describing characteristics associated with variations in human behaviour and
preferences for action. Figure 4 provides key phrases with which each set of characteristics is associated.

![Tetramap](http://www.tetramap.com/)

**Figure 4: Tetramap, understanding personal style**

We chose the Tetramap for this research because of the parallels we could discern with each of the other two frameworks. An ‘earth’ style is characterised by a need for order and explicitly defined structures. An ‘air’ preference indicates a need for clarity of outcomes and clear goals. A ‘water’ style prefers to ‘be with’ people and to give and receive support, while a ‘fire’ style is most likely to be energised by ideas with less concern for order and stability. As indicated in Figure 4 Brett and Brett use the form of a tetrahedron (a four-sided figure) to present their model. We have adapted it to a matrix format to suit our purposes – but emphasise that - as with the authors - we are not indicating a more/less valuing among the four styles.

### 6. Framework 4 – ‘Open’ and ‘Closed’ Games

In our paper of 2003 (Leigh & Spindler, 2003) we described our use of a bi-modal continuum of ‘open/closed’ games (Christopher & Smith, 1987) and its usefulness in helping facilitators understand how factors help determine the nature of an activity. These factors are -
i. the opening statement framing the action
   ranging from ‘here’s a puzzle - how will you solve it?’ to ‘here’s a situa-
   tion - decide what to do’
ii. the method of briefing
    from tightly structured to unstructured and loose
iii. the role of the facilitator
    from authoritative leader to ‘vigilant observer’
iv. the scenario
    from well defined to unclear
v. debriefing focus
    from delight in shared solutions to thoughtful lack of
certainty and awareness of new possibilities

This was chosen as a device to aid facilitators in describing the kinds of
activities they prefer to use. We accept that work context has an impact on
choice of activities for routine use. However we also assume such choices are
as much a consequence of their own preference for how to be a facilitator,
as of the needs of a particular context. This adaptation of Christopher and
Smith is an attempt to avoid limiting the research solely to an assessment
of espoused beliefs (Argyris, 1982) by inviting respondents to describe the
kinds of activities they actually prefer to use.

7. Research Design

To assess connections among preferences for particular styles of facilitation,
philosophies of education and personal styles we asked participants in adult
education programs at UTS to identify their preferences for particular educational
and personality frameworks - as described above.

As noted above the Christopher & Smith categories of ‘open’ and ‘closed’
games (and simulations) were adapted to create a bimodal Likert scale. Re-
lated characteristics were placed at either end of a continuum. Participants
were first asked to choose one alternative for each pair of items. They were
then asked to indicate the strength of their agreement with each statement
selected, by giving it a weighting on a four point scale as shown in the ex-
tract below.

<table>
<thead>
<tr>
<th>‘This is the problem: how will we solve it?’</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Your opening remarks encourage players to have the same general assumptions about the learning process and have a feeling of ‘togetherness’</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Converted Likert Scores</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>

Table 1
Strong agreement was indicated by marking the 4. To create a scoring system the bimodal scale was converted to a simple Likert scale where responses ranged from 1-9.

Statements of a preference for ‘closed’ were scored 1-4, and statements relating to ‘open’ were scored 5-8. Low scores thus indicate a stronger preference for more structure (‘closed’) and higher scores indicate a stronger preference for less structure (‘open’) with a higher tolerance for ambiguity.

Participants were then provided with a set of frameworks in a PowerPoint presentation (as illustrated in Figures 1 to 4 above) with accompanying explanation. Participants were asked to choose only the cell most closely resembling their preference within each framework. To ensure that they did not automatically make a numerically based choice across the frameworks, the cells were not numbered. When scoring the responses the cells were numbered 1-4 according to the degree of structure/flexibility and clarity/ambiguity indicated by descriptions of the contents of each cell. Scores of 1-2 indicated a preference for more structure and clarity, stability, authority etc and scores of 3-4 were indicated a preference for greater flexibility and ambiguity.

8. **Building a model for developing flexible facilitation skills**

As this is an emergent research process we are finding that some of our earlier conceptions of facilitation are being modified as we continue. There does seem to be a traceable development path followed by ‘expert’ facilitators - by which we mean those most able to adapt to changing circumstances and tolerate ambiguity without the need to repossess power. At ISAGA 2003 we presented a draft image of our understanding of this developmental path and its current form is now presented in figure 5. As the ‘path’ shows we believe that facilitators mostly begin their development as a ‘teacher’ drawing on their familiarity with this approach from experiences with traditional schooling.
A more radical move is required to feel comfortable operating as a ‘facilitator’. It involves letting go of the need to ‘be in control’ and learning to trust both one’s own capabilities and the abilities and knowledge of the students/participants. Finally the shift up to working as an ‘improviser’ involves being able to fully devolve power and authority to others while retaining the capacity to support and sustain the learning process as a whole. In this mode individuals are able to heed the advice of the Dao de Jing (Wing, 1986) which proposes that:

The wise deals with things through non-interference, and teaches through no words.

What prompts anyone to proceed on this journey is less clear, and apparently highly individualised. Some seem able to adopt it early and quite comfortably while others actively deny the validity of such a stance.

References


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