Assessing the learning organization: part 1 – theoretical foundations

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Abstract

Asserts and explores the claim that further headway in substantive wide-scale learning organization development is seriously jeopardised unless individual organizations objectively measure their progress. In part 1, a new evaluative standpoint grounded in "new science" is suggested, and foundations for two non-traditional discriminant approaches based on this standpoint are discussed. The potential to link such assessments to business performance is evaluated. In part 2, applications of these two approaches in organizational settings are reviewed.

Introduction

The concept of the learning organization and detailed procedures for its development have been available for some considerable time through populist sources such as Senge (1990) and Senge *et al.* (1994), but also through a wealth of academic articles and books. Unfortunately progress still remains painfully slow, e.g. Hitt (1996). Garvin's comments (1993) are as topical as ever: "… despite the encouraging signs, the topic (building a learning organization) in large part remains murky, confused, and difficult to penetrate". In this same vein we contend that with absent capability and disposition for an organization to measure its progress, further headway in substantive wide-scale learning organization development is seriously jeopardised.

Goh and Richards (1997) argue that learning organization implementation has been hindered by the lack of a measurable approach. A review of the literature supports this view, providing only very few examples of progress assessment (Leitch *et al.*, 1996; Gardiner and Whiting, 1997); there is a similar lack in even the measurement of learning activity (Allen, 1997; Benoit and MacKenzie, 1993; Bohlin and Brenner, 1995; Goh and Richards, 1997; Gardiner and Whiting, 1997). Evidence is even harder to come by of organizations linking learning to ROI and to the kinds of results that might convince hard-headed business people to risk their money on a learning organization journey (Wills and Oliver, 1996; Boudreau and Ramstad, 1997). In the absence of one or more practical well-founded assessment approaches, even a preliminary exploration of means to substantiate a business case for a learning organization is precluded.

In parts 1 and 2 of this paper we examine this state of affairs and the reasons for it. In part 1 a different perspective is proposed for evaluating progress toward learning organization ideals, including foundations for two non-traditional discriminant approaches which will not require the intrusion of experts either in the application of the assessments or in the analyses and interpretation of results. In part 2, applications of these two approaches in organizational settings are reviewed. Related instruments which have been used in pilot studies to assess and monitor parameters the authors consider relevant to the learning

organization are described, and some results of their application are discussed. The potential to link such assessments to business performance is evaluated in both parts 1 and 2.

Our overall purpose in this paper is two fold. First, to recount our attempts to provide simple discriminant techniques for learning organization assessment. This is a work in progress, and we cannot claim at this point to have validated all aspects of techniques we will discuss. Second, to stimulate interest in evaluation of learning organization variables and to open a dialogue concerning the practicality and theoretical efficacy of viewing learning organizations from a "new science" (Wheatley, 1992) point of view in order to operationalize such discriminants.

It is our hope that through this two-part publication, other practitioners will be encouraged to try the methods and, if validated, popularise, and further extend them. We are also concerned to form communities of practice in this topic with others who would be prepared to partner with us, and with one another, in further exploration and exploitation of these techniques.

Assessing the learning organization via learning measurement

On the face of it, simply measuring the extent and types (adaptive and generative) of learning going on in the organization should be the best approach to assessing progress toward learning organization ideals. However, the issue of assessment of learning is itself problematic. Pondering the issue of assessment reveals a puzzle. If the "learning organization" is achievable, in some respect it should be measurable; however, the issue of what constitutes "learning" or "organizational learning" needs to be problematised.

The question of what we mean by "learning" in the context of the learning organization is an epistemological issue. The following examples illustrate this:
- *Reductionism*: we tend to measure what is measurable, as a way of representing difference in the phenomenon in which we are interested. When the job of measurement is tough, we tend to measure what we can measure – which is not necessarily a reliable representation of change in the phenomenon itself. We need measures of "learning" that are "meaningful" rather

than measures that are produced for the sake of measurement.
- *Elusiveness of "the phenomenon"*: "Learning" is a construct, not an activity. Arguably it is impossible to perceive "learning"; we can observe and discriminate between various kinds of human activity, but in a sense "learning" is not observable and always has to be inferred. So what is "learning" taken to mean – what behaviours, qualities and so on constitute "learning"?
- *Relationship to change*: the most measurable learning may not be critical in terms of change leverage and performance. For example, Fisher and Torbert (1995) advocate the process of "action inquiry" as a means of pursuing long-term change. This is a process that (in principle) involves questioning of an organization's most deeply-held assumptions – it could prove very difficult to measure in practice. This can be contrasted with measuring "learning activity" in the form of training courses and the like, which is an approach so often accepted as relevant. Formal learning activity (Marsick and Watkins, 1990) can be measured with relative ease – however, is this type of measure applicable to learning organization assessment? Should one expect there to be any significant linkage between changes in formal learning activity and business performance?

These issues, and others of course, relate to the classic scientific problems we associate with the ability to identify operational concepts and measurable variables. They indicate that "How do we measure learning?" is not a straightforward question, and we should rightly be cautious about claims of measurability.

The position we take in this paper is that assessment of the "learning organization" is not principally a scientific or technical issue. In other words, it is not an issue of identifying the most appropriate indicators of learning, and then devising optimal techniques for their measurement. We do see this assessment as a political endeavour, and one to which it will be most helpful to take a heuristic approach. By "political" we mean that "learning" is not an objective, measurable entity. It is not, in our view, a concept that can be operationalized scientifically. The activity of assessing learning and of making progress towards the

learning organization ideal is, we argue, essentially a social process.

First, we contend that attempting to link progress toward learning organization ideals with demonstrable "bottom line results" is a social need not a scientific obligation. Peters and Waterman (1982), among others, have critiqued the myth of rationality which supposes that companies choose to undertake organizational change programmes on the basis of "hard evidence". The field of organization development is typified by a great lack of evaluative evidence of the efficacy of change programmes. We are, therefore, led to question the assumption that "hard-headed business people" are necessarily convinced by "objective" evidence of results. We think, based on our experience, that some "hard evidence" may well contribute to credibility, but that business people make decisions on a far wider range of criteria.

Second, in our opinion, "learning" is political in the sense that what counts as learning, or what types of learning are valued, may be defined differently by different actors. The fact that mainstream literature which advocates "learning organizations" seems rarely, if ever, to discriminate between desired and non-desired learning suggests that the concept is primarily rhetorical rather than actual. The idea of "the learning organization" may function more as a concept to focus aspiration than as some objective state.

Therefore, if we are to assess progress toward learning organization ideals by measuring learning it seems there are a number of options, none of which is politically neutral:

(1) One can use indicators based on what managers perceive to be desired outcomes of learning, or desired behaviours. This should have the advantage of being straightforward. The disadvantage is likely to be that it will say little if anything about learning *per se*. In other words, learning is assumed to be taking place if managerially-desired outcomes are evident.

(2) One can attempt to be rational or quasi-rational by measuring what appear to be the best indicators available of learning itself. This results in, for example, measurement of formalised learning activity. This type of measure will approximate learning, at the cost of:
- assuming a linkage between "learning activity" and "learning"; and

- ignoring "informal and incidental" learning (Marsick and Watkins 1990), which many (Senge included, we believe) would say omits by far the most significant types.

We suggest that this type of measurement may be most often adopted for its presentational function; for example in demonstrating to outside audiences that a company has a proven "commitment" to learning (Smith, 1998).

(3) One can adopt indicators identified by researchers. For example, Pedler *et al.* (1991) have defined 11 characteristics of the "learning company"; from Argyris (1992) one could search for evidence of what he calls "Model II" behaviour. However, there is no agreement about these types of indicator. Potentially they are self-sealing – there is no established empirical link that we know of between the presence of such indicators and organizational effectiveness, for example. Another potential disadvantage is that they can depend on experts to administer and interpret. Therefore, this type of measure might be adopted most often as an evaluative indicator within change programmes, the actual measure depending on which model or consultant is utilised.

Assessing the learning organization via an heuristic approach

From the above discussion, and the paucity of literature on this theme, one might conclude that the issue of assessment should be set aside. Paradoxically, we suggest all three options cited above are valid, in so far as they provide "heuristics" rather than objective measures. By this we mean that such measures are maps that orient us to action (Weick, 1994). Weick argues that accuracy should not be the highest priority for a representation of a phenomenon; what matters, he suggests, is that a representation or map should galvanise effort and provide a means to monitor progress, so that managers steer through an "action research" process rather than waiting for some authoritative guide.

The issue here, therefore, is not so much the scientific merit of measures themselves, as the suitability of the heuristic for the various purposes in hand. As we hope we have

illustrated, the principal criteria are likely to be social and political in nature.

Therefore, on the basis of the above alone we do not embrace uncritically the proposition that learning organization initiatives can be or even should be measurable in terms of learning or bottom-line results. However, we do want to suggest that the old truism: "What doesn't get measured won't improve" is an important contributory factor to slow progress in operationalizing learning organizations. We would also add "What doesn't get measured won't be valued".

As discussed above, there is no doubt that learning is difficult to measure directly or to link directly to traditional performance indicators. However, many authorities have long claimed that one can assume learning has taken place when there is a change in behaviour or performance. In other words, we can base an heuristic assessment on inferences about learning. For example, Weick (1991) proposed that learning has taken place if there is a shift in performance when the stimulus remains essentially the same. With regard to organizational learning, Ackoff and Emery (1972) submit that learning is the ability of a system to improve its efficiency under constant environmental conditions. Argyris and Schon (1974) define organizational learning as involving the determination and correction of error, and as the testing and restructuring of the organization's theories of action. Levitt and March (1988) suggested that an organization learns by encoding influences from history into routines that guide behaviour. More recently, Huber (1991) postulated that an entity learns if, through processing information, its range of potential behaviours is changed.

If we accept these views as heuristics, they do provide an avenue for the assessment of progress toward learning organization ideals, since there is a long history of successful performance appraisal and assessment of behavioural change via relatively simple methods. We are aware of only one published attempt to do this with regard to the learning organization (Campbell and Cairns, 1994).

The issue of error remains. Just because one cannot be definitive about the nature and measurement of "learning", it does not follow that one cannot go off course. Reliability remains an issue – instruments still need to measure what they are inherently designed to measure. In our own work we adhere to

Weick's position: that there needs to be a critical inquiry process into the results of action, including critical inquiry into the assumptions built into the map or instrument with which one began.

At best, treating assessment as a heuristic process allows for both pragmatism and criticality. It leaves the issue of choice over what type of assumptions and maps to adopt in the first place. Our bias is towards "heuristic measures" that meet the following criteria:

- They assess conditions in which there is a high probability that "learning" (i.e. broadly as defined by Senge) and "inquiry" (i.e. broadly as defined by Fisher and Torbert) is taking place, rather than attempting to measure "learning" *per se.* In other words, they assess the "current state" of the organization. This, therefore, leaves learning to be inferred.
- They enable participants in client organizations to assess their own "learning climate".
- They provide a focus for inquiry, a means of marking out "learning climate" as something of value as an orientation and as a possible correlate to effective performance.

This approach grows from our contention that people in organizations must be able to value the differences that the learning organization makes in their organizational contexts. For us this boils down to questions such as "How do we recognize the differences?" and "What is the target that we are linked to?", rather than "Which measurement(s) shall be used?". It is also about enabling people in organizations to increase their own awareness of, and to assess for themselves, the "health" of their working environments and its impact on organizational aspects that they value.

A "new science" organizational behavioural platform

From the previous section we see that to pursue this heuristic approach we must establish a theoretical platform for behavioural changes in the learning organization which are relevant to the people and business impacts the learning organization is expected to deliver. In searching for generic assessment approaches we chose not to limit our search to any very specific learning organization approach or discipline (Senge, 1990; Senge *et al.*, 1994), but rather to look for approaches

which would assess the systemic behavioural changes which it was anticipated ought to take place as a result of learning organization initiatives.

The theoretical platform we chose to explore is based in complexity and field theory, which are concepts of physics (Gleick, 1987). We find this provides a helpful and satisfying integration of concerns with learning, performance and "heuristics". These notions were first popularised as a "new science" perspective on business organizations by Wheatley (1992), and later developed by other authors such as Kelly (1994). A reading of Wheatley's (1992) book will show that some of our questions about the concept of learning are essentially questions about an underlying way the world has been perceived – a way that Wheatley argues has become outdated, and which cannot now help us significantly with the complexity and turbulence of modern organizational life.

Most organizations at the detail level are chaotic systems. The learning organization by design is chaotic. Control in chaotic systems is exercised through what experts term dynamic connectedness (Bateson, 1988), fields of meaning for action (Mitroff and Linstone, 1993), or organizing gestalt (Boisot, 1994).

Wheatley (1992) believes that "… what leaders are called upon to do in a chaotic world is shape the organization through concepts, not through elaborate rules and structures". The organizational concepts that are articulated form a "strange attractor" – that which maintains patterning within chaos – and individuals infer meaning from these concepts to produce order from chaos. Wheatley (1992) might well argue that "the learning organization" is itself an "organizing principle" rather than an objective, attainable reality; an idea through which new forms and practices can emerge, not an ideal state to be achieved.

She adds "… when meaning is in place in an organization, employees can be trusted to move freely, drawn in many directions by their energy and creativity. There is no need to insist, through regimentation or supervision, that any two individuals act in precisely the same way. We know they will be affected and shaped by the attractor, their behaviour never going out of bounds. We trust that they will heed the call of the attractor and stay within its basin. We believe that little else is required except the cohering presence of a purpose, which gives people the capacity for self-

reference". These views are consistent with, and perhaps essential to, design and development of the learning organization.

Based on Wheatley's approach, we might envisage learning as one or more of the following:

- as the capacity of a system to allow "dissipation" and "self-organization" – a capacity to tolerate disorder such that new forms of order can emerge;
- as an effective organizing principle;
- as a relational phenomenon; the "pattern that connects" rather than "relates" (Bateson and Bateson, 1988).

Accordingly, the theoretical platform for behavioural changes in the learning organization which is the basis for our approach to assessment is related to the calibration of "energy states" or "fields of meaning" that are likely to be conducive to learning.

Two approaches to assessment based on a "new science" organizational behavioural platform

Founded on this "new science" understanding of how a learning organization might structure behavioral change, we have each used an assessment approach which is practical and consistent with the tenets of field theory. These approaches are:

- An approach based in a three "field" system (focus, will, capability) for modelling performance, where performance is driven by the general business or learning organization outcomes desired (Smith, 1993; Smith, 1997).
- An approach based on a model of organizations as "energies" of consciousness (Tosey, 1994).

In part 2 of this paper we will explore the details of these approaches and how we have applied them in attempting to measure and monitor the current "state" of a learning organization.

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